



WORKPLACE SAFETY AND HEALTH IN UTAH

*From The
National Institute for Occupational Safety and Health*



State Profile 2002

*Delivering on the Nation's promise:
Safety and health at work for all people through prevention.*

The National Institute for Occupational Safety and Health

NIOSH is the primary federal agency responsible for conducting research and making recommendations for the prevention of work-related illness and injury. NIOSH is located in the Department of Health and Human Services in the Centers for Disease Control and Prevention. The NIOSH mission is to provide national and world leadership to prevent work-related illness, injury, disability, and death by gathering information, conducting scientific research, and translating the knowledge gained into products and services. As part of its mission, NIOSH supports programs in every state to improve the health and safety of workers. NIOSH has developed this document to highlight recent NIOSH programs important to workers and employers in Utah.

The Burden of Occupational Illness and Injury in Utah

- In Utah, there are approximately 1.1 million individuals employed in the workforce.¹
- In 2000, 61 workers died as a result of workplace injuries.²
- The transportation and public utilities industry had the highest number of fatalities, followed second by construction, and third by the mining and agriculture, forestry, and fishing industries.²
- In 1999, the most recent year for which data are available, the rate of fatal workplace injuries was 5.1 deaths per 100,000 workers – above the national average rate of 4.5 deaths per 100,000 workers.²
- In 2000, there were 53,300 nonfatal workplace injuries and illnesses in Utah.³

The Cost of Occupational Injury and Illness in Utah

In 2000, the most recent year for which data are available, a total of \$159.3 million was paid for workers' compensation claims by Utah private insurers, self-insured employers, and state funds.⁴ This figure does not include compensation paid to workers employed by the federal government and also underestimates the total financial burden for private sector businesses, since only a fraction of health care costs and earnings lost through work injuries and illnesses is covered by workers' compensation. Chronic occupational illnesses like cancer are substantially under-reported in workers' compensation systems because work-relatedness is often difficult to establish.

How NIOSH Prevents Worker Injuries and Diseases in Utah

Health Hazard Evaluations (HHEs) and Technical Assistance

NIOSH evaluates workplace hazards and recommends solutions when requested by employers, workers, or state or federal agencies. Since 1993, NIOSH has responded to 22 requests for HHEs in Utah in a variety of industrial settings, including the following example:

Salt Lake City, Utah: Evaluation of Work Area for Noise and Ventilation

In 1999, an employee representative requested an HHE to assess noise levels, air movement, temperature, and humidity at an Immigration and Naturalization Service office in Salt Lake City, Utah, where employees provide information to the public. One information officer had retired for medical reasons that included problems with his voice. NIOSH investigators concluded that noise in the public reception area was too high for good speaking conditions and that the plexiglass partition blocked speech sounds. In addition, the waiting area was not well ventilated and the office temperature was too cold. Recommendations to management included: adding barriers between customer positions and soft materials to the reception area walls and floor; purchasing amplifier headsets for information officers; improving the ventilation system; and providing employees with ways to better control the office temperature.

Fatality Assessment and Control Evaluation (FACE) Investigations

NIOSH developed the FACE program to identify work situations with a high risk of fatality and to formulate and disseminate prevention strategies. The following FACE investigation was conducted in Utah:

Utah: Fifteen-Year-Old Part-Time Worker at Retail Grocery Store Suffers Amputation

On February 14, 2000, a 15-year-old part-time worker at a retail grocery store had his right arm caught in a meat grinder he was reassembling. Subsequently, his right arm was amputated just below the elbow. NIOSH investigators concluded that to help prevent similar occurrences, employers should: ensure that all equipment, including manufacturer-provided safety devices, is maintained in safe operating condition; ensure that all equipment is surveyed regularly to identify appropriate safety control improvements; know and comply with child labor laws that establish the types of work that youths may perform; and train workers to recognize and avoid the hazards of equipment operation and maintenance.

Fire Fighter Fatality Investigation and Prevention Program

The purpose of the NIOSH Fire Fighter Fatality Investigation and Prevention Program is to determine factors that cause or contribute to fire fighter deaths suffered in the line of duty. NIOSH uses data from these investigations to generate fatality investigation reports and a database of case results that guides the development of prevention and intervention activities. The following fire fighter fatality investigation was conducted in Utah:

Utah: Career Fire Fighter Dies and Three Are Injured In a Residential Garage Fire

On March 31, 2000, a 36-year-old male fire fighter died and three other fire fighters were injured while fighting a residential garage fire. When the first crew arrived at the scene, the captain assumed incident command (IC) and along with the victim and another fire fighter quickly put out most of the fire. Then the captain instructed the victim and the other fire fighter to enter the structure, search upstairs for civilians, and open some windows for ventilation. The lieutenant from a second crew that had just arrived was directed by

the captain to assist the two fire fighters in the structure. The lieutenant reached the two fire fighters upstairs but, noticing the heat had increased, he decided they had to exit. When the victim did not exit, a team of two fire fighters from an ambulance also at the scene entered the structure through a window, located him, and dragged him out. The victim was transported to a hospital where he was pronounced dead. NIOSH investigators concluded that, to minimize the risk of similar occurrences, fire departments should: implement written standard operating procedures for emergency operations; ensure that IC continually evaluates the risk during operations at a fire scene; ensure that fire fighters take precautions to reduce the risk of entrapment; ensure that IC maintains accountability for all personnel at the scene; and consider providing fire fighters with personal alert safety systems integrated into their self-contained breathing apparatus.

Building State Capacity

State-Based Surveillance

NIOSH funds the Adult Blood Lead Epidemiology and Surveillance Program (ABLES) in the Utah Department of Health. Through ABLES, the agency's staff track and respond to cases of excessive lead exposure in adults which can cause a variety of adverse health outcomes such as kidney or nervous system damage and potential infertility. In addition, NIOSH funds the Sentinel Event Notification System for Occupational Risk (SENSOR), through which the agency's staff track and develop interventions for specific occupational diseases and injuries such as burns.

Rocky Mountain Center for Occupational and Environmental Health

This Education and Research Center (ERC), one of 16 NIOSH ERCs nationwide, is based at the University of Utah and provides training in four core areas: occupational medicine, occupational health nursing, industrial hygiene, and safety engineering. Continuing education and outreach programs are also provided in addition to a pilot project research program for new investigators. In fiscal year 2001, a total of 41 students were enrolled and 19 students were graduated. Sixty-one continuing education courses were provided to 1,629 professionals.

Additional information regarding NIOSH services and activities can be accessed through the NIOSH home page at <http://www.cdc.gov/niosh/homepage.html> or by calling the NIOSH 800-number at 1-800-356-NIOSH (1-800-356-4674).

¹U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics, Current Population Survey, 2000.

²DOL, BLS in cooperation with state and federal agencies, Census of Fatal Occupational Injuries, 1999-2000.

³DOL, BLS in cooperation with participating state agencies, Survey of Occupational Injuries and Illnesses, 2000.

⁴National Academy of Social Insurance, *Workers' Compensation: Benefits, Coverage, and Costs, 2000 New Estimates*, May 2002.